

REMARKS

The Examiner is thanked for the careful examination of the application, and for the indication of allowability in claims 2-7. However, in view of the following remarks, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections.

Claim 1 has been rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,593,548, hereinafter Matsumura, in view of JP 2002-093713, hereinafter Taniguchi. The Examiner relies on Matsumura as being prior art under 35 USC 102(e). However, in view of the fact that Matsumura is a national stage of an international PCT application that was published in Japanese, Matsumura is not proper prior art under 35 USC 102(e).

Accordingly, applicants submit that the rejection of claim 1 based on Matsumura and Taniguchi is improper and should be withdrawn.

Claim 1 has also been rejected under 35 USC 103(a) as being unpatentable over WO 02/25712, in view of Taniguchi.

The Examiner relies upon claim 1 of Matsumura for allegedly disclosing all elements of claim 1, except for the shield **plate** having a heating element passing through hole through which the heating element passes in a **non-contact** manner and a plurality of through holes for a passing gas. The Examiner relies on Taniguchi for the shield plate.

However, Applicants submit that Taniguchi does not teach or suggest the claimed plate, as suggested by the Examiner. Instead, Taniguchi discloses a plurality of triangular shaped heat resisting elements 22 that include through holes for the heater. The dictionary definition of plate, which is supported by the

specification of the present application, defines "plate" as a "smooth, flat, relatively thin, rigid body of uniform thickness". The American Heritage Dictionary, second college edition. Although this does not require the shield plate to be completely flat, it certainly precludes structure such as the triangular pieces in Taniguchi from constituting a plate.

Taniguchi uses the large triangular elements 22 in order to provide a greater surface area for heat transfer than would otherwise be provided by the small diameter heaters 16. The insulating elements 22 are heated so as to provide a large contact area for decomposing and/or reacting the raw material gas on the surface of the insulating elements 22.

It is also important to note that claim 1 requires that the shield **plate** has a heating element passing through hole through which the heating element passes in a **non-contact** manner and a plurality of through holes for a passing gas. The insulating elements 22 of Taniguchi have neither of these features. For example, Taniguchi does not indicate whether or not the heaters 16 pass through the insulating elements 22 in a non-contact manner. Accordingly, there is no teaching in Taniguchi of having the heaters 16 pass through the insulating elements 22 in a non-contact manner.

In one embodiment of the present invention, the shield plate 500 has a heating element passing hole 501 through which the heating element 3 passes in a non-contact manner and a plurality of through-holes 502 for a raw material gas. However, unlike Taniguchi, in the present invention, the raw material gas is not decomposed nor activated when it passes through the plurality of through holes 502 since the heating element 3 passes through the passing hole in a non-contact

manner so that the shield plate is not heated by the heating element. However, the claimed invention is not limited to the disclosed embodiments.

Accordingly, applicants submit that the rejection of claim 1 based on WO 02/25712 and Taniguchi is improper and should be withdrawn. In the event that the Examiner maintains the rejection, the Examiner is respectfully requested to point out where Taniguchi teaches that the heating elements 16 pass through elements 22 in a non-contact manner.

In the response filed on December 12, 2005, applicants submitted a terminal disclaimer. A petition to withdraw the terminal disclaimer is submitted concurrently herewith. In view of the distinctions set forth above between the present invention and the teachings of Taniguchi, the terminal disclaimer is not necessary to overcome the double patenting rejection set forth in the Office Action dated September 12, 2005. See § 1490, V, A of the Manual of Patent Examining Procedure.

To further define the present invention, new dependent claim 8 is submitted herewith. Claim 8 depends from claim 1, and defines the shield plate as substantially planar. Accordingly, claim 8 is patentable over the applied art, at least for the reasons set forth above with respect to claim 1.

In light of the foregoing amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections. In the event that there are any questions concerning this response, of the application in

general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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